

CURRENT CLAIMS

1. A vaccine suitable for enhancing and/or modulating T-cell dependent immunity comprising a T-cell dependent antigen, or part thereof, and an associated adjuvant, B7.1 and/or B7.2, or an active binding fragment thereof, which is adapted to stimulate a T-cell lymphocyte via the cell surface receptor CD28.

2. A vaccine according to Claim 1 wherein said antigen is a soluble antigen.

3. A vaccine according to Claim 1 or 2 wherein said antigen is a protein.

4. A vaccine according to Claims 1-3 wherein said antigen and said adjuvant are cross-linked theretogether.

5. A vaccine according to Claims 1-4 wherein said vaccine is composed of said antigen and said adjuvant which are not physically co-joined.

6. A vaccine according to Claims 1-5 wherein said adjuvant is recombinantly manufactured.

7. A vaccine according to Claim 6 wherein said antigen and said adjuvant comprise a recombinant fusion protein.

8. A vaccine according to Claims 1-7 wherein said vaccine comprises an immunostimulating composition adapted to elicit an enhanced cytotoxic T-cell response.

10. A vaccine according to Claims 1-9 wherein said vaccine comprises, liposomes, biodegradable microspheres or an emulsion of antigen and adjuvant in oil.

11. A method for the manufacture of a vaccine capable of eliciting a T-cell dependent immune response comprising selecting a suitable T-cell dependent antigen, or part thereof, and combining said antigen, and an adjuvant, B7.1 and/or B7.2, or an active binding fragment thereof, whereby said vaccine is adapted to stimulate a T-cell specific response by stimulation of a T-cell receptor CD28.

12. A method for the manufacture of a vaccine according to Claim 11 wherein said antigen and adjuvant, is/are recombinantly manufactured and are co-joined to produce a chimeric fusion protein.

13. A method according to Claim 11 or 12 wherein said antigen and adjuvant are cross-linked theretogether.

14. A system for use in the production of a vaccine capable of eliciting a T-cell dependent immune response wherein said system comprises a cell expressing a selected T-cell dependant antigen, or part thereof, and an adjuvant, B7.1 and/or B7.2, or an active binding fragment thereof.

15. A system according to Claim 14 wherein said system is adapted so that said cell secretes said antigen and/or adjuvant, and in the instance where both are secreted they are secreted either singularly or as a co-joined fusion protein.

18. An isolated DNA molecule encoding either or both said antigen and/or said adjuvant according to Claims 1-10.